# **2024 IEEE Seoul Section Annual Report**

# **PART A - SECTION SUMMARY**

# **A.1 Executive Summary**

#### • Section Executive Committee Member List

Position	Name	Affiliation
Chair	Gilsoo Jang	Korea University
Vice-chair	Inkyu Lee	Korea University
Secretary	Kyeon Hur	Yonsei University
Treasurer	Seung-Won Jung	Korea University
Awards and Recognition Committee Chair	Chaewoo Lee	Ajou University
Chapter Coordination Committee Chair	Seong Oun Hwang	Gachon University
Educational Activities Committee Chair	Seongjae Cho	Ewha Womans University
Fellow Candidate Discovery Committee Chair	Inkyu Lee	Korea University
Higher Member Promotion Committee Chair	Jong Chang Lee	Hongik University
History Committee Chair	Dae Gwon Jeong	Korea Aerospace University
Information Management Committee Chair	Jinyoung Hwang	Korea Aerospace University
Membership Development Committee Chair	Oh-Soon Shin	Soongsil University
Nomination Committee Chair	Cheon Won Choi	Dankook University
Professional Activities Committee Chair	William Jinho Song	Yonsei University
Strategic Planning Committee Chair	Kukjin Chun	Seoul University
Student Activities Committee Chair	Namyoon Lee	Korea University
Student Branch Coordination Committee Chair	Youngsu Cha	Korea University
Technical Activities Committee Chair	Minhan Yoon	Kwangwoon University
Volunteer Recognition Committee Chair	Chaewoo Lee	Ajou University
Life Member Affinity Group Chair	Dae Gwon Jeong	Korea Aerospace University
Women in Engineering Affinity Group Chair	Jung Hee Han	Korea Aerospace University
Conference Quality and Management Chair	Sunghyun Bae	Kangwon University
Young Professional Affinity Group Chair	Heewon Seo	Dankook University
Mentor	Jong Chang Lee	Hongik University
Senior Mentor	Kyun Hyon Tchah	Korea University

### • Student Paper Contest held offline at Ewha Womans University, December 7, 2024

The 2024 IEEE Seoul Section Student Paper Contest was held on December 7, 2024, at Ewha Womans University. A total of 85 papers were submitted and reviewed. Awards included the Grand Prize, Gold Prize, Silver Prize, and Bronze Prize recognizing the outstanding contributions of student participants.

#### • IEEE Seoul Section Chapter Activation Meeting

On June 10, 2024, IEEE Seoul Section hosted a Chapter activation meeting online with six participants. The meeting focused on reviewing the current status of the Section and Chapters and developing strategies to enhance Chapter activities.

### • Annual General Meetings

IEEE Seoul Section holds an annual general meeting every year, and in 2024, the meeting took place on December 7.

Time and Place	Agenda			
17 20 10 20	Report of 2024 IEEE Seoul Section Student Paper Contest			
17:30-18:30, December 7, 2023 Ewha Womans University	Report of activities of Seoul Section in 2024			
	Report of financial audit of Seoul Section in 2024			
	Report of Election of 2024 IEEE Seoul Section Chair			

#### Executive Committee Meetings

This year IEEE Seoul Section held two executive committee meetings in February, and November, respectively. The following table summarizes the meeting agenda.

No	Time and Place	Agenda
		• Report of activities and finance of IEEE Seoul Section in 2023
1	Mon., Feb. 26, 2024	<ul> <li>Report of activities and plans from each committee</li> </ul>
		Brief introduction on new IEEE Seoul Section Fellow members
2	Tue., Nov. 19, 2023	Report of activities and plans from each committee

#### • IEEE Seoul Section Election Result

The annual general meeting of IEEE Seoul Section was held on December 7, 2024, following the 2024 IEEE Seoul Section Student Paper Contest. During this meeting, Prof. Inkyu Lee at Korea University was announced to serve as the 2025 IEEE Seoul Section Chair

# **A.2 Financial Report**

#### Income

Item	Amount (KRW)
IEEE Support	28,294,384
Interests	66,991
Other Incomes	14,941,498
Total	43,020,036

#### • Expenditure

Item	Amount (KRW)
Meetings and Social Events	22,017,789
Student Activities, Chapter Support	6,897,970
Other Management & General Expenses	13,390,632
Total	42,306,391

#### • Total Net Worth

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Item	Amount (Won)					
Balance beginning of the year	75,902,136	A				
Total Income of the year	43,020,036	В				
Total Expenditure of the year	42,306,391	С				
Total Net Increases	713,645	В-С				
Balance end of the year	76,615,781	A+B-C				

# **PART B - ORGANIZATIONAL ACTIVITIES**

# **B.1 Membership Development Activities**

- IEEE Seoul Section has experienced significant membership growth recently. Although the growth rate slowed slightly this year, there was still a substantial increase of 382 members.
- Total number of active members in the past 3 years.

Grade Year	Total	Mem	Sr.M	FM	НМ	LF	LM	LS	AM	GSM	St.M	Other
2024	5439	2147	441	39	2	22	29	25	152	1971	611	
2023	5057	2067	423	43	1	18	29	20	133	1805	518	-

- Seoul Section will enhance the membership development through the following four strategies:
  - Implementing a program for recruiting undergraduate and graduate students
  - Establishing a program for recruiting persons in industry
  - Creating a program for elevating member grades of existing members
  - Acknowledging and appreciating members for their voluntary services
- Seven new fellows in Seoul Section were announced.
  - Cho, Sungbae (Research Engineer/Scientist)
    For contributions to hybrid artificial intelligent systems for industrial applications
  - Choi, Hongsoo (Research Engineer/Scientist)

    For contributions to the development and implementation of medical tethered and untethered microrobots
  - Masuoka, Yuri (Research Engineer/Scientist)
    - For contributions to leading-edge foundry transistor development
  - Shim, Byonghyo (Research Engineer/Scientist)
  - For contributions to sparse signal processing and multi-antenna technology
  - Kim, Younsun (Standards Contributor)
    - For contributions and leadership in 5G physical layer standardization
  - Cheun, Kyungwhoon (Technical Leader)
    For leadership in 5G mmWave and vRAN technologies
  - Lee, Jae Sung (Technical Leader)
    For leadership in the field of information and communication technology

### **B.2** Chapter Activities

• Total Chapter Summary in the Seoul Section

Technical Chapters	Code	Chair
Aerospace and Electronic Systems Society	AES10	Young Kil Kwag
Antennas and Propagation Society	AP03	Hosung Choo
Broadcast Technology Society	BT02	Byeung Woo Jeon
Computer Society	C16	Hwangnam Kim
Circuits and Systems Society	CAS04	Jinwook Burm
Communications Society	COM19	Byonghyo Shim
Control Systems Society	CS23	Poo Gyeon Park
Electron Devices Society	ED15	Woo Young Choi
Geoscience and Remote Sensing Society	GRS29	Sang-Wan Kim
Information Theory Society	IT12	Sang-Hyo Kim
Microwave Theory and Techniques Society	MTT17	Yongshik Lee
Nuclear and Plasma Sciences Society	NPS05	Kisung Lee
Power & Energy Society	PE31	Sung Kwan Joo
Power Electronics Society	PEL35	Jung-Ik Ha
Photonics Society	PHO36	Ju Han Lee
Robotics and Automation Society	RA24	Songhwai Oh
Sensors Council	SEN39	Seong Oun Hwang
Signal Processing Society	SP01	Myung Jin Bae
Solid-State Circuits Society	SSC37	Tae Wook Kim
Vehicular Technology Society	VT06	Byonghyo Shim

Chanton	Doto	TOTAL	Event
Chapter	Date	Title	Category
AES10	19-07-2024	Radar Workshop	Technical
AES10	04-07-2024	Avionics Systems Symposium Korea (ASSK)	Technical
C16	29-01-2024	Seminar: Applications of Large Language Models	Technical
C16	06-02-2024	Seminar: Solving Cold-Start Problem in Time-series Forecasting	Technical
C16	16-05-2024	SEMINAR : Machine Learning Workshop - Blackbox Meta Learning	Technical
C16	27-11-2024	SEMINAR : Machine Learning Workshop - Mamba : Linear-Time Sequence Modeling with Selective State Spaces	Technical
C16	21-08-2024	SEMINAR: Machine Learning Workshop - Graph- Attention-Based Reinforcement Learning	Technical
CS23	18-01-2024	Committee Meeting on ICCAS 2024	Administrative
CS23	01-02-2024	2024 ICROS-TCCT Workshop	Technical
CS23	29-03-2024	2nd Committee Meeting on ICCAS 2024	Administrative
CS23	02-04-2024	Workshop on Multiagent Systems	Technical
CS23	27-04-2024	2024 Workshop on Signal Processing and Control	Technical
GRS29	26-09-2024	A tutorial on InSAR time series analysis with MintPy	Technical
IEEE Seoul		, and the second	
Blockchain	31-05-2024	1st meeting with DLTSF Smart contract group	Technical
Group MAG33	19-08-2024	The 9th Summer School of Magnetics	Technical
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MAG33	23-09-2024 25-09-2024	IEEE DL Lecture_Yonsei University	Technical Technical
MAG33	25-09-2024	IEEE DL lecture_KAIST	Technical
NPS05	08-03-2024	Annual Meeting "Trends and Outlook of Future Radiation Convergence Technologies"	Technical
NPS05	05-08-2024	Seoul Chapter Operations Committee Meeting	Nontechnical
NPS05	29-10-2024	Social Event "Korea Night"	Nontechnical
PE31	25-09-2024	IEEE Seoul Section PES Chapter Seminar	Technical
PE31	13-12-2024	IEEE Seoul Section PES Chapter Special Seminar	Technical
PE31	21-10-2024	IEEE Seoul Section PES Chapter Joint Seminar	Technical
PE31	06-12-2024	IEEE Seoul Section PES Chapter Executive Committee  Meeting	Administrative
PEL35	23-05-2024	IEEE Seoul Section PELS Chapter Seminar	Technical
PEL35	20-06-2024	IEEE PELS Day Meeting Seoul 2024	Technical
PHO36	28-11-2024	Photonics Conference 2024	Technical
PHO36	30-08-2024	Distinguished Lecture for Photonics at Seoul	Technical
RA24	04-04-2024	Soft Wearable Robot Optimization for Augmenting and Restoring Human Mobility	Technical
RA24	26-09-2024	Control theory: Reliable design under variability	Technical
SEN39	10-07-2024	Security, Privacy and Trust in AI	Professional
SSC37	05-11-2024	ICCE-ASIA 2024 SSCS Seoul Chapter Section Event	Technical
SSC37	10-05-2024	ISSCC Review Workshop	Technical
SSC37	06-12-2024	IEEE SSCS Seoul Chapter Special Seminar and Annual Meeting	Technical

# **B.3 Professional and Continuing Education Activities**

- Region 10 Educational Activity Program at Ewha Womans University
  On August 26, 2024, a special invited lecture on hardware-oriented artificial intelligence was conducted at Ewha Womans University as part of the R10 Educational Promotion Program, with 66 participants in attendance.
- Leadership Training for South Korea Volunteers at Hongik University and Korea University Prof. Mousmi Ajay Chaurasia, Chair of the R10 VUEC, was invited to promote IEEE activities in Korea. On November 17, 2024, a session was held at Hongik University with 45 participants, followed by another session on November 18, 2024, at Korea University with 36 participants.

### **B.4 Students Activities**

Student Branch	Date	Title	Event Category
Gachon University	10-04-2024	Tips for Research How to write a paper to be accepted	Professional
Gachon University	18-09-2024	Deep Language Models and Code Intelligence	Technical
Jeonbuk Natl Univ, PEL35, IA34	10-05-2024	2024 EFEC(Environmental-friendly Energy Conversion) Laboratory Open-Lab Day!	Humanitarian
Jeonbuk Natl Univ, PEL35, IA34	20-11-2024	Seminar inviting overseas scholars and experts	Technical
Jeonbuk Natl Univ, PEL35, IA34	30-12-2024	Expert invitation seminar : Power electronics for AI computing device	Technical
Gachon University, SEN39	26-12-2024	Securing the Digital Future: The Role of Blockchain Technology	Technical

### • Student Paper Contest held offline at Ewha Womans University

The student activity of IEEE Seoul Section can be highlighted by the 2024 Student Paper Contest, which was held online on December 7, 2024. A total of 85 papers were presented and evaluated for the selection of prize winners.

# **B.5 Affinity Group Activities**

• Young Professional (YP)

Date	Title	Location	Attendee #
29-08-2024	SYWL2024 Congress Participation	National Olympics Memorial Youth Center	334
07-10-2024	Mentoring Program Report	Dankook University	52

• Life Members (YM)

Date	Title	Location	Event Category
27-04-2024	LMAG Seoul Administrative Meeting 1	Yeoido Radar Institute	Administrative
02-05-2024	Seoul Section LMAG Annual Meeting 1	Seoul National University	Nontechnical
10-09-2024	LMAG Seoul Administrative Meeting 2	Yeoido Radar Institute	Administrative
26-09-2024	Seoul Section LMAG Annual Meeting 2	Kwanak-gu Kwanak-ro 1	Nontechnical

# **B.6 Awards & Recognition Activities**

N/A

# **B.7** Communication Activities (Newsletter, Home Page, E-mail etc.)

• IEEE Seoul Section Homepage (https://site.ieee.org/seoul/)
IEEE Seoul Section is currently operating its website and regularly updates events such as the Student Paper Contest, announcing them through periodic updates.

• IEEE Seoul Section Facebook Page(https://www.facebook.com/ieee.seoul/)
IEEE Seoul Section also run its Facebook page.

# **B.8 Industry Relations**

N/A

### **B.9 Humanitarian Technology Activities**

• N/A

# **B.10** Community Activities

N/A

### **PART C - OTHERS**

### **C.1** Special Events

• IEEE Seoul Section Milestone for CDMA Commercialization
On June 10, 2024, Korea's first IEEE Milestone for CDMA commercialization was unveiled at SKT Tower in Seoul by IEEE President-elect Kathleen Kramer and key representatives from MSIT, SKT, ETRI, Samsung, and LG. The ceremony, attended by over 200 people, included the unveiling of the plaque and a celebration in Supex Hall with around 150 participants, including pioneers of the 1990s CDMA project.

- C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)
  - N/A
- C3. Collaboration with other IEEE Sections
  - N/A
- C.4 Support extended to Sub-sections & Society Chapters within the Section
  - N/A
- C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)
  - N/A
- C.6 Problems anticipated and suggestions for solutions, if any
  - N/A

#### PART D - GOALS AND PLANS

### D.1 Continuation of project/activity in progress and their implementation plans

- Seoul Section has built concrete plans for the year of 2024. A part of the plans are listed below.
  - Seoul Section will expand the membership by engaging new industry members.
  - Seoul Section will vitalize inactive student branches, encouraging participation in the activities, e.g., IEEE Xtreme.
  - Seoul Section will encourage members to elevate their member grades.
  - Seoul Section will support the technical activities of the chapters of Seoul Section.
  - Seoul Section will improve member services so that all the members are able to attain useful information at the website of Seoul Section.
  - Seoul Section will support the activities of Membership Development Committee, Fellow Candidate Discovery Committee, Volunteer Recognition Committee, and Higher Membership Promotion Committee to increase the membership.
  - Seoul Section will invite volunteers to the workshops that provide updated manuals for membership development and conference organization.
  - Seoul Section will publish newsletters to communicate with the members of Seoul Section.
  - Seoul Section will collaborate more closely with other academic societies in Korea, e.g., IEIE, KICS, KIEE, KIEES, KIISE, KIPE, KIPS, KOSBE, and OSK.
  - Seoul Section will support and encourage members to participate in IEEE Region 10 activities as well as IEEE Headquarter activities.
  - Seoul Section will continue to honor the services of volunteers by recognizing and appreciating
    them through media, newsletters and meetings. Not only the services of individuals but also the
    achievements of chapters, student branches, and industries will be disclosed for the recognition of
    them through plaques, awards, prizes, badges, and certificates.

#### **D.2** Goals and Future Plans

- N/A
- D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.
  - N/A
- D.4 Business Plan for Sustainable Growth and Financial Stability.
  - N/A



<IEEE Milestone Event for CDMA Commercialization Event on 10-09-23>



<IEEE Seoul Section LMAG Administrative Meeting on 10-09-23>



<IEEE Seoul Section Student Paper Contest & Annual General Meeting on 07-Dec-24>